

L735-36AU

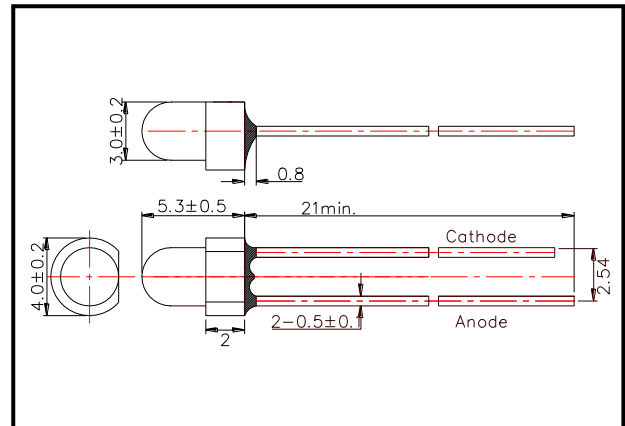
Infrared LED Lamp

L735-36AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 735nm.

Specifications

- | | |
|----------------------|-----------------------|
| 1) Product Name | Infrared LED Lamp |
| 2) Type No. | L735-36AU |
| 3) Chip | |
| (1) Chip Material | AlGaAs |
| (2) Chip Active Area | 400um x 400um |
| (3) Peak Wavelength | 735nm typ. |
| 4) Package | |
| (1) Type | Φ 3mm clear molding |
| (2) Resin Material | Epoxy Resin |
| (3) Lead Frame | Soldered (Lead Frame) |

Outer dimension (Unit: mm)



Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	Pd	150	mW
Forward Current	IF	75	mA
Pulse Forward Current	IFP	500	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	240	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature	TSOL	250	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 3 seconds at 250°C

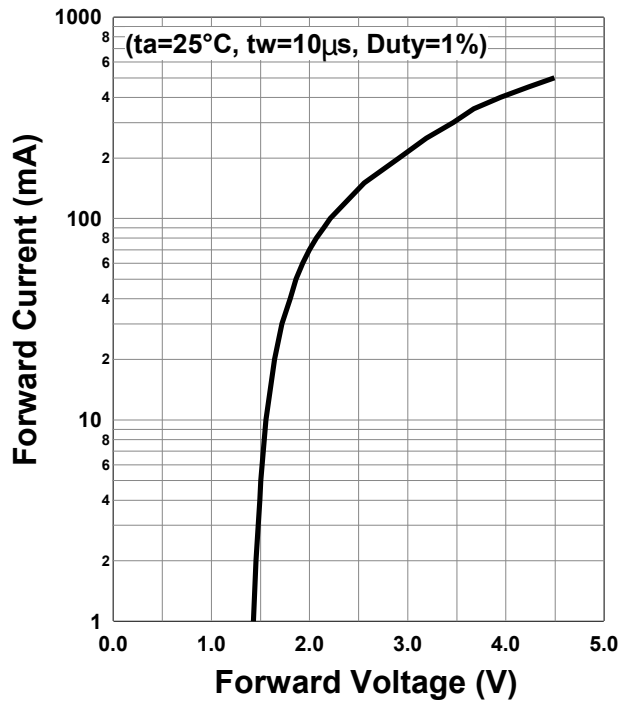
Electro-Optical Characteristics [Ta=25°C typ.]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	IF=50mA		1.85	2.00	V
Radiated Power	P _O	IF=50mA	18	25		mW
Total Radiated Power	I _E	IF=50mA	23	32		mcd
Peak Wavelength	λ _P	IF=50mA	720	735	750	nm
Half Width	Δλ	IF=50mA		25		nm
Viewing Half Angle	θ _{1/2}	IF=50mA		±23		deg.
Rise Time	t _r	IF=50mA		35		ns
Fall Time	t _f	IF=50mA		60		ns

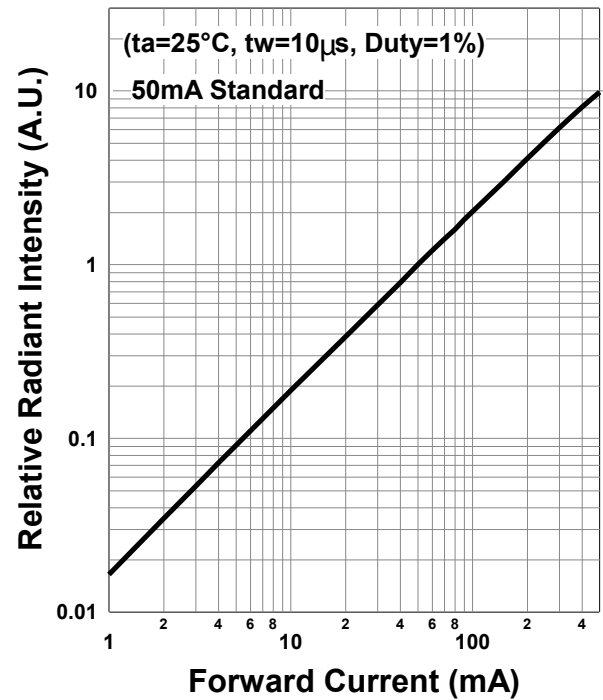
‡Radiated Power is measured by S3584-08.

#Radiant Intensity is measured by CIE127-2007 Condition B.

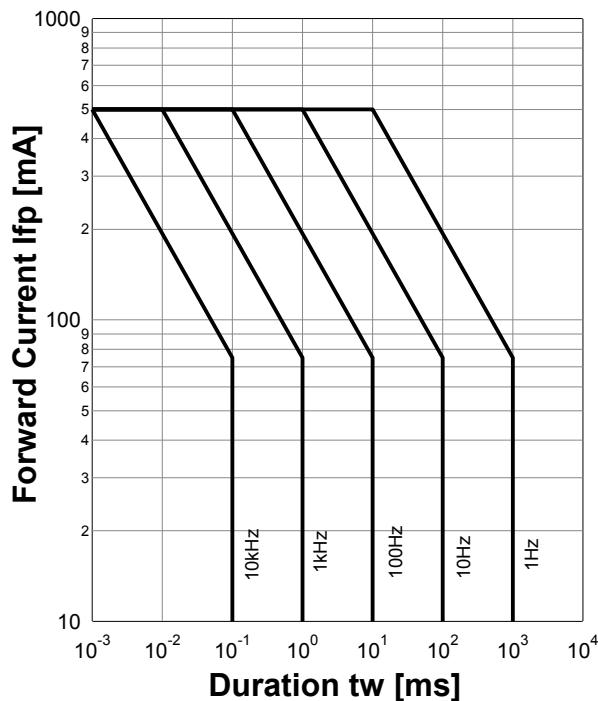
Forward Current - Forward Voltage



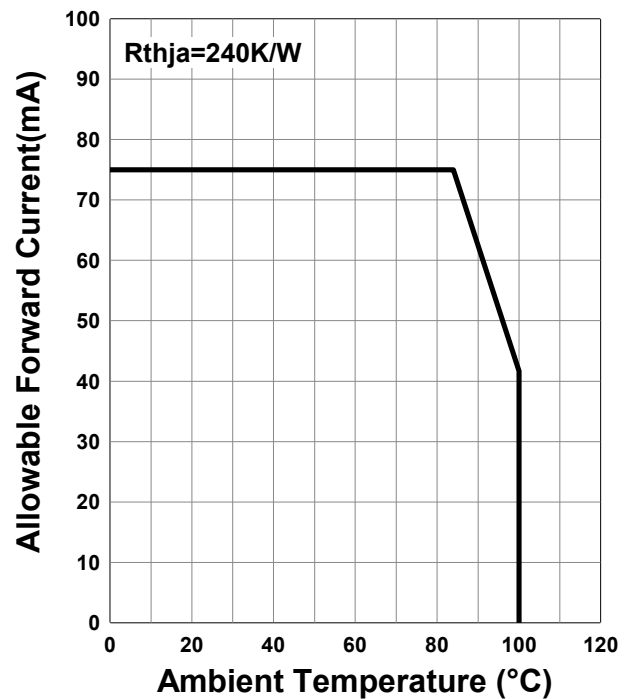
Relative Radiant Intensity - Forward Current

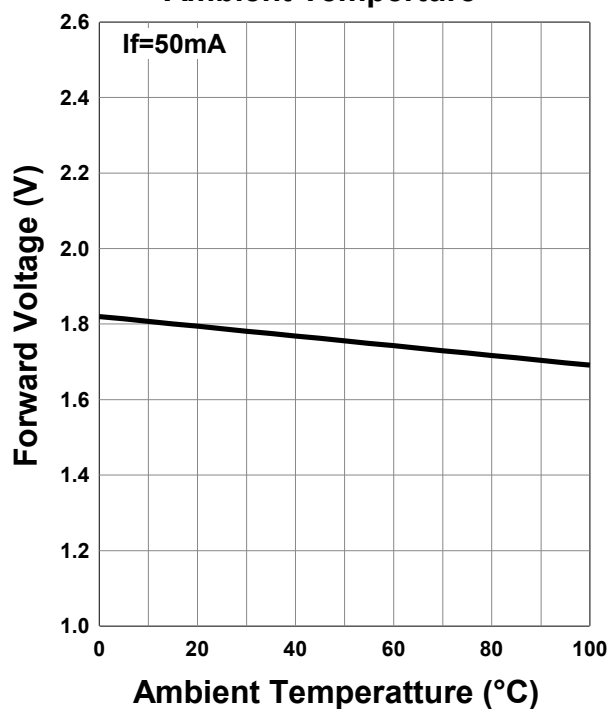
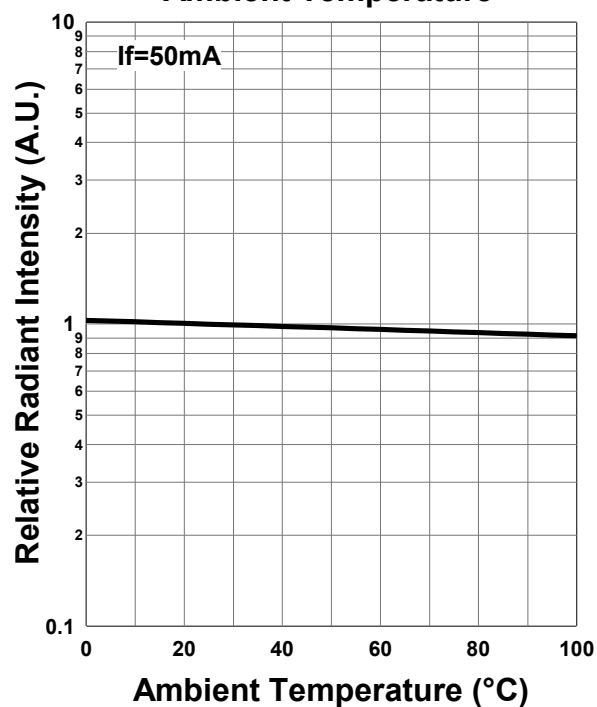
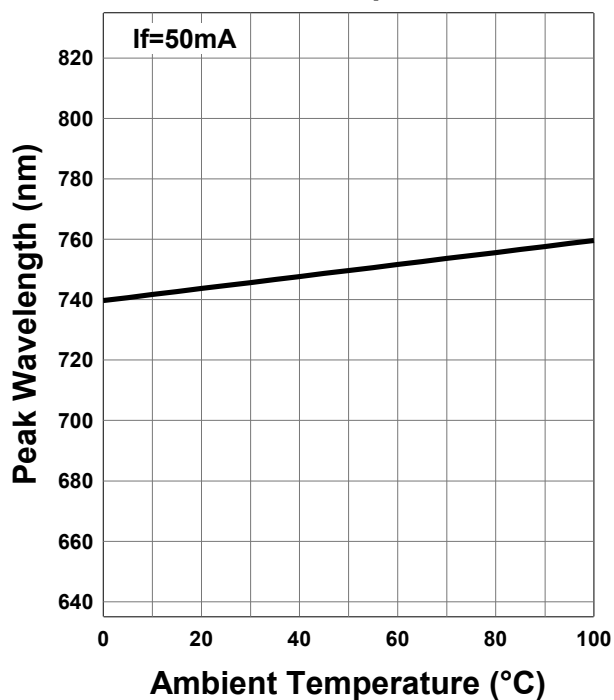


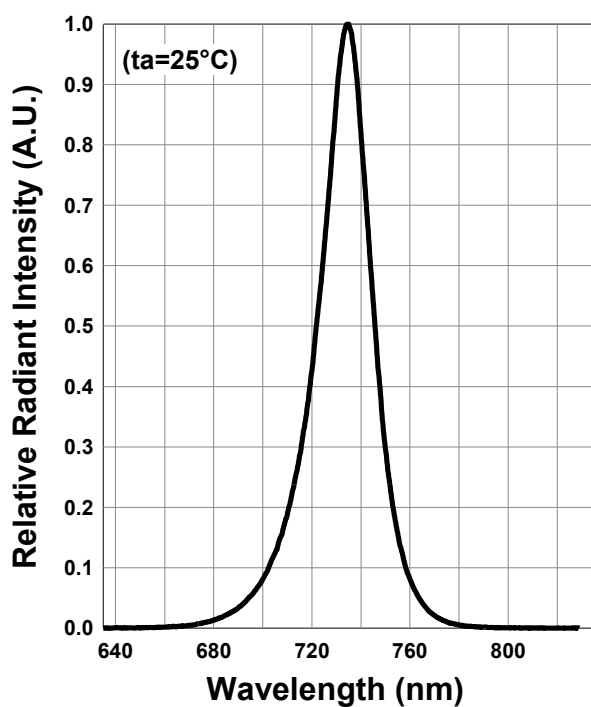
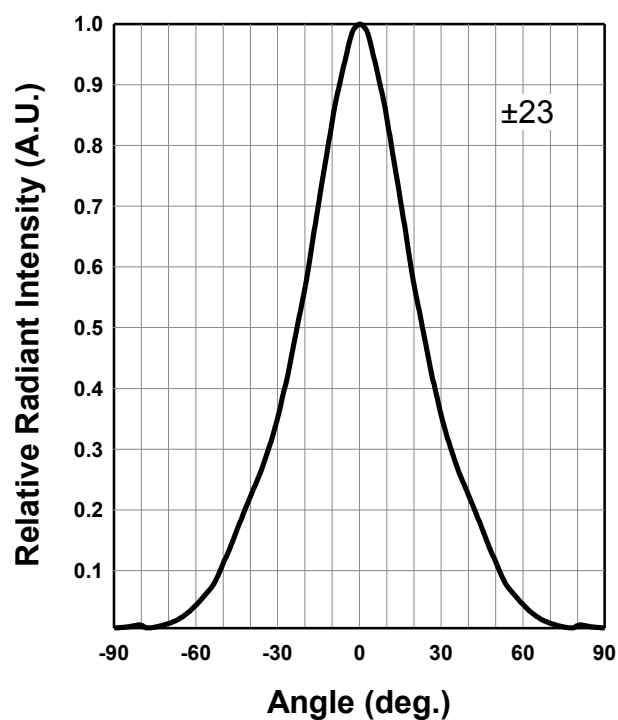
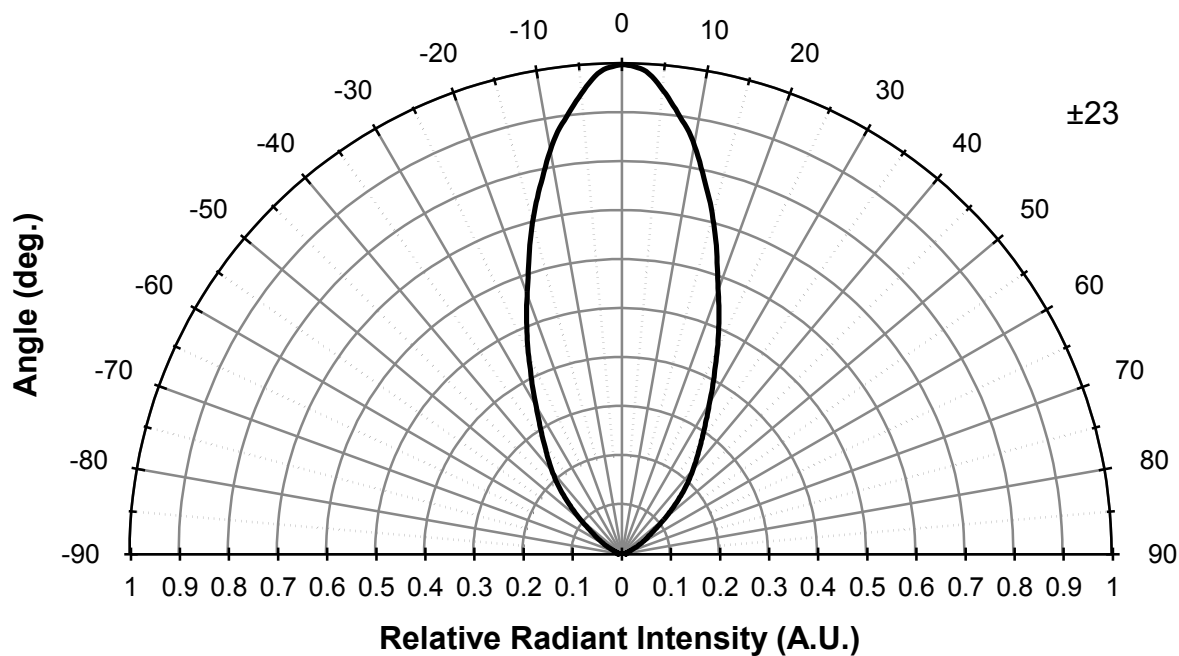
Forward Current - Pulse Duration



Allowable Forward Current - Ambient Temperature



**Forward Voltage -
Ambient Temperature****Relative Radiant Intensity -
Ambient Temperature****Peak Wavelength -
Ambient Temperature**

Relative Spectral Emission

Radiation Characteristics

Radiation Characteristics


Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.